

691.6

Manuscript

CV 1 1912



EXEMPLARS



EXEMPLARS

DESIGNED TO BE OF SERVICE
TO BUILDING OWNERS, ARCHI-
TECTS, ENGINEERS AND
CONTRACTORS

MISSISSIPPI WIRE GLASS COMPANY
MISSISSIPPI GLASS COMPANY

Offices

NEW YORK 220 FIFTH AVENUE
CHICAGO, ILL. 7 WEST MADISON STREET
ST. LOUIS, MO. MAIN AND ANGELICA STREETS

Factories

ST. LOUIS, MO. PORT ALLEGANY, PA. MORGANTOWN, W. VA.
FLOREFFE, PA. LATROBE, PA.

A DEFINITION

SOLID.—(sol'id) *a.* Having its constituent particles so firmly coherent as to resist stress; compact, firm, and unyielding; being a solid; opposed to fluid; as iron and stone are solid. Capable of resisting ordinary force or of sustaining ordinary weight so as to be relied on practically; unyielding and substantial: firm and stable; as solid ground; a solid wall. ** Having no aperture or crevice. ** Having or relating to all three dimensions—length, breadth, and thickness. ** (Standard Dictionary.)

Truthful advertising is recognized at a glance, read and appreciated. Therefore, through our entire career we have avoided venomous and fictitious statements. We have always claimed Mississippi Wire Glass to be homogeneous and Solid and we have never been fools enough to try to deceive the public by saying that Solid Wire Glass can only be made by our process. Because we realize it is a physical impossibility to make by any process commercial Wire Glass which is *not* solid.

However, from our experience as the manufacturers who perfected the art of making Wire Glass, which has been and still is The Standard, we rightfully claim that our process is superior to that of any other manufacture and produces a better quality of glass in every way.

The best evidence of this is the fact that there have been so many infringements of our patents.

MISSISSIPPI WIRE GLASS COMPANY

INTRODUCTION

WE present in the following pages some of the highest class buildings in the world in which the Architects, Owners or Engineers have deemed it advisable to install Mississippi Wire Glass. It is evidenced they have carefully considered proper protection, and in some cases wisely concluded that, in order to make the building fireproof so far as window openings are concerned, they should not only install "Wire Glass" in windows adjacent or adjoining fire hazards on either side, but in every window throughout the building, including those on the street front above the ground floor.

With elevator shafts and stair wells likewise protected by "Wire Glass" in metal frames, the building with "Wire Glass" in all windows is merely a collection of fireproof units one above the other, and the occupants of such a building need have little fear of fire.

It is quite possible that the contents of such a building may be more or less inflammable, but even so, should a fire start on one floor there is no danger of its spreading through window openings to the floors above, as is usually the case where ordinary glass is installed. It is estimated by authorities that twenty-five per cent of the fire loss in this country is due to lack of window protection. (See letter on page 11 and illustration on page 47.) Had the fire occurred in the vicinity of such buildings as are illustrated on pages 20 and 37 they would have suffered little or no loss. This being the case, why can we not reduce the \$250,000,000 fire loss which this country suffers annually by demanding that buildings be better equipped for the prevention of fire.

We citizens of the United States or elsewhere who have to pay our *pro rata* portion in advanced insurance rates due to lack of proper construction for the prevention of fire, should each one of us feel morally obliged to forward the interests of better fire protection.

HISTORICAL POINTS ON "WIRE GLASS"

ABOUT twenty years ago the Mississippi Company started to manufacture "Wire Glass"—a rather crude looking material in comparison with its present product, which is known to be the best obtainable—homogeneous, solid and universally recognized as the standard. However, though crude in appearance, it served its purpose as a fire retardant, proved by many practical demonstrations which thoroughly convinced architects, engineers and the general public that it was possible to protect a building from fire by means of a material which would not keep its interior in utter darkness.

Mississippi Wire Glass was the foundation of many of our present day achievements in fire protection: for instance, it brought forth the manufacture of metal window frames and many other such forms of metal construction in which "Wire Glass" is installed for the protection and safety of a building. This, however, was not a result of our efforts and we, therefore, do not attempt to assume the credit of such valuable devices being offered to the public.

But in connection with "Wire Glass," we not only assume credit, but rightfully claim the honor as manufacturers, of having not only promoted its use, but furthered the interests of proper fire protection by perfecting the art of manufacturing "Wire Glass" which is Solid and Homogeneous, with a bright wire, clean and clear glass metal, distinct and distinctive patterns, also glossy and uniform cutting surface, making Mississippi Wire Glass slightly in appearance, uniform in quality and with an average of less imperfections than, and equal in strength to, any of the so-called sub-standard materials yet produced.

We particularly call attention to the fact that Mississippi Wire Glass is absolutely Solid, and those familiar with the progress in the manufacture of "Wire Glass" know that our present product is second to none.

In the early days of its manufacture, "Wire Glass" was made by what afterwards was termed the sandwich process

by rolling a sheet of glass over which was stretched the wire mesh, and over that rolled another sheet of glass. This process was found to be impractical and was, therefore, abandoned. However, competitors who realize the superiority of Mississippi Wire Glass make inferences that our product is made by the sandwich process—which is untrue. They even go so far as to try and make architects, engineers and the general public believe that there is a decided difference in the strength of different products, by conducting private tests and using the reports on same as a means of advertising. To satisfy ourselves on this point we had tests conducted by Professor Frederick L. Pryor of the Stevens Institute of Technology, which showed that there is no positive way of determining the strength of any Wire Glass. Even two sheets of the same size and nominal thickness of one manufacturer's product will not have the same actual thickness nor the same tensile strength, while in addition to this difficulty the breaking point varies with the size of the sheets and the speed with which, and the location at which, the pressure is applied. So one can see the impossibility of securing data sufficiently accurate for use as the basis of any statements of comparative strength.

We, therefore, feel it unfair to try to create a wrong impression, and in all of our publicity work we have never claimed for this material more than we absolutely knew it was capable of doing.

Solid Wire Glass was manufactured by the Mississippi Company before the Underwriters' Laboratories were organized, and on August 24, 1899 we published a circular stating that the "Solid" Wire Glass manufactured by us was the only make of Wire Glass which had been officially approved, after tests by the Boards of Fire Insurance Underwriters of the principal cities of the United States.

Following this the present Underwriters' Laboratories, Inc., was organized in November of 1901, and they, following earlier approval by all underwriters throughout the United States, recognized our Wire Glass as standard and issued to

us their approval, giving our product the title—Fire Retardant No. 32.

Below is an extract from the List of Manufacturers of Fire Appliances, published January, 1913, by the National Board of Fire Underwriters at the recommendation of the Underwriters' Laboratories, Inc. The list of Wire Glass manufacturers is headed by the name of the Mississippi Wire Glass Company and in the remarks following it is acknowledged that this company manufactures the Standard product.

(EXTRACT)

"New York, N. Y., Marking:

Mississippi Wire Glass Co. No distinctive marking. This manufacturer claims exclusive right to use of hexagonal mesh, but this form of mesh is being freely used by other manufacturers and sub-standard wired glass with hexagonal mesh is on the market."

THICKNESSES, MAXIMUM SIZES AND APPROXIMATE WEIGHTS OF MISSISSIPPI WIRE GLASS AND FIGURED GLASS

WIRE GLASS

Style	Thickness	Maximum Width	Maximum Length	Approximate Weight per Square Foot
Polished	$\frac{5}{16}$	48	130	4 lbs.
"	$\frac{5}{8}$	46	130	8 "
Maze	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
"	$\frac{3}{8}$	48	130	$5\frac{1}{4}$ "
Romanesque	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
Syenite	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
Muranese	$\frac{1}{4}$	42	110	$3\frac{3}{4}$ "
Rough	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
"	$\frac{3}{8}$	48	130	$5\frac{1}{4}$ "
Ribbed	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
"	$\frac{3}{8}$	48	130	$5\frac{1}{4}$ "

VAULT OR FLOOR LIGHTS

Rough Wire Glass	$\frac{3}{4}$	12	12	$9\frac{3}{4}$ "
Ribbed " "	$\frac{3}{4}$	12	12	$9\frac{3}{4}$ "
Ground " "	$\frac{3}{4}$	12	12	$9\frac{3}{4}$ "

POLISHED FIGURED GLASS

Apex about	$\frac{1}{4}$	50	100	4 "
----------------------	---------------	----	-----	-----

PLAIN FIGURED GLASS

Romanesque	$\frac{1}{8}$	48	110	2 "
"	$\frac{3}{16}$	60	110	$2\frac{1}{2}$ "
Maze	$\frac{1}{8}$	48	110	2 "
"	$\frac{3}{16}$	48	110	$2\frac{1}{2}$ "
Florentine	$\frac{1}{8}$	48	110	2 "
"	$\frac{3}{16}$	48	110	$2\frac{1}{2}$ "
Syenite	$\frac{1}{8}$	48	110	2 "
"	$\frac{3}{16}$	48	110	$2\frac{1}{2}$ "
Muranese	$\frac{1}{8}$	42	110	2 "
Ondoyant	$\frac{1}{8}$	30	100	$1\frac{3}{4}$ "
Fig. No. 2	$\frac{1}{8}$	42	110	2 "
" " 2	$\frac{3}{16}$	42	110	$2\frac{1}{2}$ "
Rough	$\frac{1}{8}$	48	130	2 "
"	$\frac{3}{16}$	48	130	$2\frac{1}{2}$ "
"	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
"	$\frac{3}{8}$	48	130	$5\frac{1}{4}$ "
"	$\frac{1}{2}$	48	130	$7\frac{1}{2}$ "
Ribbed	$\frac{1}{8}$	48	130	2 "
"	$\frac{3}{16}$	48	130	$2\frac{1}{2}$ "
"	$\frac{1}{4}$	48	130	$3\frac{3}{4}$ "
"	$\frac{3}{8}$	48	130	$5\frac{1}{4}$ "
"	$\frac{1}{2}$	48	130	$7\frac{1}{2}$ "
Pentecor	$\frac{1}{8}$	44	130	2 "
"	$\frac{3}{16}$	44	130	$2\frac{1}{2}$ "

INFORMATION ON GLAZING

GLASS being one of the last materials to go into a building, it is very often the case that plans are not in proper shape for the glass contractor to take off sizes sufficiently in advance to enable him to place his order far enough ahead to give the manufacturers time to cut the glass to sizes and make shipment in time to enclose the building by the date desired. It is therefore advisable to give this point consideration in due time in order to facilitate matters and assure glazing being done on time, as in many cases the delay is not the fault of the glass contractor or the manufacturer, as the tremendous demand for Standard Wire Glass and Figured Glass necessitates orders taking their turn as they are received.

EXTRACT FROM PUBLICATION OF RULES AND REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS (Edition of 1906)

2. Size of Glass—

a. The unsupported surface of the glass allowed shall be governed by the severity of exposure and be determined in each case by the Underwriters having jurisdiction, but in no case shall it be more than 48 inches in either dimension or exceed 720 square inches.

b. The glass to be of such dimensions, after selvage is removed, that the bearing in the groove or rabbet is not to exceed $\frac{1}{8}$ inch less than the full depth called for in rules 6 and 7.

c. The glass to be retained by the structural part of the frame or sash independently of the material which may be used for weather-proof purposes. Only non-inflammable material to be used in setting glass in the sash.

In consideration of the above extract, it is well to bear in mind the following sizes when planning window, door or partition openings to be glazed with Standard Wire Glass, as these are the most advantageous sizes where glass is not to exceed 720 sq. inches:

15 x 48

18 x 40

20 x 36

24 x 30

The Mississippi Wire Glass Company is the original manufacturer of Solid Wire Glass, and its product is universally recognized as the Standard Wire Glass, being the material upon which the Underwriters' Standard was based in 1899.

By our process of manufacture, Standard Wire Glass is cast solid, and has an average of less imperfections than any sub-standard product on the market.

The quality of metal and process of manufacturing Standard Wire Glass produces the very highest quality with a tensile strength second to none.

Henry F. Brown

Ernest W. Cusby

Henry A. Fiske

Theodore C. Brown

Walter J. Chase

Henry W. Brown and Company

Insurance

Telephone John 631

Cable "Kibac"

100 William Street

Philadelphia Office

435 Walnut Street

New York

AUGUST 4, 1922

Disasterproof Glass Co.,

300 Fifth Avenue,

New York City

Attention of Mr. J. E. Martin

Gentlemen:-

You inquire as to the amount of the fire loss of this country due to the absence of proper protection of windows especially by approved frames properly glazed with fire glass.

Verifiably, there are no precise figures on this subject, but we have consulted leading fire underwriters of national standing and learn they estimate such a saving could be not less than 25%.

Yours very truly,

HENRY F. BROWN & CO.

H.F.

THE above letter is sufficient evidence that the fire loss due to lack of proper window protection may be conservatively estimated at at least 25 per cent.

EFFICIENCY OF "WIRE GLASS" WINDOWS

EXTRACTS FROM A PAPER READ BEFORE THE INSURANCE
SOCIETY OF NEW YORK AT THE BOARD ROOMS OF THE NEW
YORK BOARD OF FIRE UNDERWRITERS, APRIL 25th, 1911,

BY HENRY A. FISKE

IN considering this subject, we naturally have in mind two things: First, the general utility of "Wire Glass" as compared to other well-known fire retardants, such as shutters; and second, the actual value of "Wire Glass" as shown by the fire record. Let us then first compare with the fire shutter and note its advantages or disadvantages, taking into account not only the fire record but general utility and service.

Let us consider some of the more important advantages.

First.—The "Wire Glass" window can be used on all classes of buildings and on all sides, including street fronts. The ordinary shutter is not adaptable to many buildings, nor to street fronts. It is of the greatest importance to protect *all* important buildings on *all* sides. This is not only necessary where risk is exposed by other buildings, but also to complete the vertical cut-off between floors in any building.

In all modern buildings of ordinary or superior construction it is considered essential to protect floor openings and at least retard, if not prevent, fire spreading from one floor to another, and yet, almost universally, we find no protection on one or more sides for the window openings, and fire easily finds its way from one floor to another in this way. Two notable examples right here in New York City were the Parker and Asch Building fires. In the latter case the fire started on the eighth floor, while the loss of life was on the ninth, and it is quite possible that few or no lives would have been lost if all the windows had been protected with "Wire Glass," it being apparently the consensus of opinion that the fire spread from one floor to another chiefly by way of the windows.

The problem of preventing fires from spreading from one floor to another can, with our present knowledge, only be solved by "Wire Glass," as it is evident that shutters could not generally be closed in time, even should it be attempted, and while automatic shutters are mechanically possible there seems to be no good solution of this problem as yet.

Second.—The "Wire Glass" window is ordinarily closed at the time of fire. If open, it may be easily and quickly closed. It is tested as often as it is opened, and if not frequently tested it is because it is kept closed. It is susceptible of simple automatic closing, which should be reliable. In all of these vital points it is the opposite of the shutter, which latter is ordinarily open, may be seldom tested, may not work properly when needed, may not be closed at time of fire, and perhaps most important of all, could not in many cases be closed, especially with a fire in the building itself.

Third.—Any device which is a protection against fire only will not receive the same care and maintenance as a device of daily necessity. The expense of maintenance is important, and the owner will naturally keep the expense at the minimum. Fire shutters are costly to maintain as compared to "Wire Glass" windows, which latter are really a help, the up-keep being less costly than the ordinary window. The cost of opening and closing shutters daily, of keeping them in good condition, painting, keeping free from snow and ice, is of real importance, and these features are often neglected.

Fourth.—"Wire Glass" is translucent. Fire may be seen from the outside. It may be broken easily by the firemen and is peculiarly fitted to act as a shield for the firemen while allowing a hose nozzle to be poked through the glass.

These are perhaps the more important features which have been shown by experience to be of real value, and they are borne out by the fire record, leading to but one conclusion, namely—that "Wire Glass" is generally adaptable for window openings, is quite certain to be in place when needed, and will necessarily be maintained in somewhere near its original condition.

I will make the positive statement that "Wire Glass" in standard frames is *the best protection now available against serious exposure fires*, and am confident that such a statement

cannot be disproved. In fact, we can reasonably go further and state that "Wire Glass" gives good protection against all ordinary exposure fires such as met with in congested districts, for while we have had few actual tests of "Wire Glass" in conflagrations, such tests are in its favor, and our knowledge of conflagration temperatures is sufficient on which to base an opinion. The high temperatures in burning buildings during a conflagration are caused largely by the combustible contents, and this would not occur if all window openings were protected.

The general adoption of "Wire Glass" windows would eliminate the conflagration hazard.

The problem of window openings is of vital importance. There is only one general and satisfactory solution, namely, "Wire Glass." The insurance interests are apt to be ultra-conservative, and, in this case, greatly to their detriment, for their attitude toward "Wire Glass" windows has not been liberal, and has hindered its progress. Let us look this important question squarely in the face, study it from all sides and then say what we think.

We must seek the best there is and then make the most use of it. It is not good engineering nor good underwriting to pay "Wire Glass" the back-handed compliment of saying it is acceptable for *moderate* exposures, when the facts clearly prove that it is the best for *all* exposures, internal as well as external.

As regards the non-standard window, we do not need to consider it any more than any other defective device. It is certainly entirely possible and feasible, through laboratory supervision and proper inspection, to secure a standard window, and no other should be acceptable from any standpoint. We have a standard which should be rigidly lived up to, and unsatisfactory results with defective windows, while instructive, perhaps, cannot affect the general question.

SHUTTERS *vs.* WINDOWS

The following Schedule so clearly demonstrates Mr Henry A. Fiske's statement, that we have secured permission to publish same.

Copyrighted by S. H. Pomeroy, 1908.

Put down Fair Ratings in Test Sheet below and Windows Will Win on Points.

SCHEDULE RATING FOR WINDOW PROTECTION

Poor Fair Good Excellent	O-10	STANDARD TIN- CLAD SHUTTER	FEATURES	STANDARD WIRE GLASS WINDOW	Poor Fair Good Excellent	O-10
		Tin and Wood. Oxidation. Decay.	Materials.	Galvanized Iron and Wire Glass. Resistance to Rust.		
		Partial Inspection.	Manufacture.	Complete Inspec- tion.		
		Painting and Repair Both Sides Exposed.	Maintenance.	Part of Building Conveniences. Exterior only ex- posed.		
		Factories and busi- ness buildings. Sides and rears of buildings.	Application.	All classes of build- ings. All floors and all sides.		
		Open during busi- ness hours. Open nights, Sun- days and holidays?	Service.	In position twenty- four hours every day.		
		Closed by hand. Hinges and catches exposed to weather. Time and labor re- quired.	Operation.	In position. Closed automatically. Mechanism protect- ed from weather.		
		Opaque.	Interior Fires.	Transparent.		
		Openings for flames and drafts.	Fire Stop.	Solid Surface.		
		Breaking of plain glass.	Radiation.	Fire Department Aid		
		<i>Ventilation</i> Cannot be broken. Must be opened from inside or from ladders or fire escape on out- side.	Fire Depart- ment.	<i>Ventilation</i> Broken with hook, axe, or by ladders from street.		
		<i>Hose Streams</i> Obstruction to play of streams.		<i>Hose Streams</i> Use of hose lines by firemen on ladders. Operation of high pressure of the streams.		
		<i>Protection</i> Falling glass. Falling shutters.		<i>Protection</i> Firemen at windows, ladders, and fire escapes.		
		Shutter successes.	Record of Fires.	Wire glass window successes.		

National Fire Protection Means Fire Protection for the Nation. Standard Wire Glass Windows Mean the Nation's Best Protection against Fire Exposures.



GRAND CENTRAL STATION NEW YORK

THE above picture was photographed *through a light of Polished Wire Glass* to illustrate how little the wire mesh is noticed when the eye is focused on an object beyond.

It also shows a number of Grand Central Terminal buildings, most prominent of which is the Grand Central Station in which *thirty thousand square feet of Mississippi Polished Wire Glass* was installed.

The erection of this building, one of the most beautiful railroad terminals in the world, was undoubtedly the most interesting and difficult engineering problem of its kind ever attempted and has attracted the personal attention of prominent engineers from all parts of the country.

Every appointment of the new Terminal is absolutely complete. The fact that there are no stairs makes it very simple for patrons to go from one point to another by means of the gradual incline planes which are far superior to the tiresome stairway approach.



GRAND CENTRAL STATION
NEW YORK

WARREN & WETMORE and REED & STEM
Associated Architects

THE above picture shows the magnificent detail in one of the large windows, the frame of which is cast iron reinforced by steel frame work and glazed with Mississippi Polished Wire Glass, which was given preference over all sub-standard products submitted on account of its superior quality.



ARCHITECTS' BUILDING
NEW YORK

FORTIETH ST. CO., N. Y. C. Contractors
EWING & CHAPPELL and LaFARGE & MORRIS, Associated Architects
S. H. POMEROY CO. Metal Frames

Mississippi $\frac{1}{4}$ " Maze Wire Glass.
Mississippi Polished Wire Glass Installed.



FORTY-SECOND ST. AND MADISON AVE. BUILDING
NEW YORK

BUCHMAN & FOX Architects

THE Store Windows in entrance hall, all elevator doors and metal windows for protection from fire in buildings in close proximity are glazed with *Mississippi Polished Wire Glass*.

All corridor doors and partitions glazed with Mississippi "APEX" Glass.



NEW YORK TELEPHONE CO. BUILDING
NEW YORK

McKENZIE, VOORHEES & GMELIN, Architects

S. H. POMEROY CO. . . . Metal Frames

THE above building illustrates the very highest type of modern Fire Proof construction. Being in more or less of a hazardous district, every precaution has been taken. Mississippi Wire Glass is installed in approved metal frames in every window above the ground floor, including the street fronts.

Mississippi Polished Wire Glass installed.



GUARANTY TRUST CO. OF NEW YORK BUILDING
NEW YORK

MARC EIDLITZ & SON Contractors

YORK & SAWYER Architects

THE Wire Glass originally contracted for was not the standard product, and when delivered to the building was rejected on account of its inferior quality, the contract cancelled and placed for Mississippi Wire Glass.



BANKERS' TRUST CO. BUILDING
NEW YORK

MARC EIDLITZ & SON Contractors
TROWBRIDGE & LIVINGSTON Architects
M. F. WESTERGREN . . . Metal windows, doors and partition sash

ONE of the most substantially built buildings in the country, quality being the first thing considered in the selection of all materials.
Mississippi Polished Wire Glass and Mississippi Rough Wire Glass installed in windows, doors, partitions and elevator fronts.



WOOLWORTH BUILDING
NEW YORK

THOMPSON-STARRETT CO. . . . Contractors
CASS GILBERT Architect

The highest building in the world.
Mississippi Polished Wire Glass.
Mississippi $\frac{1}{4}$ " Maze Wire Glass installed.



UNION CENTRAL LIFE INSURANCE CO. BUILDING
CINCINNATI, OHIO

ALL exterior sash in rear, light court and west elevation up to twelfth floor glazed with Mississippi Polished Wire Glass. All elevator enclosures glazed with Mississippi $\frac{1}{4}$ " Maze Wire Glass. Interior doors and partitions glazed with Mississippi $\frac{1}{4}$ " Maze Wire Glass. Doors and transoms to stair landings glazed with Mississippi Polished Wire Glass.

MISSISSIPPI WIRE GLASS PROTECTION

AN INDUCEMENT TO TENANTS

The Union Central Life Insurance Company, owners of the building illustrated on opposite page, show their realization of efficiency of Mississippi Wire Glass by advertising offices for rent in the December, 1912, issue of "Fire Protection." Below is copied from their advertisement, showing what are decided inducements.

ABSOLUTELY FIREPROOF

FIRE OUTSIDE CANNOT ENTER THIS BUILDING
FIRE INSIDE CANNOT SPREAD

What if the building next door or
in back should burn?

The Union Central Building would
be safe because:

- 1 It is constructed of steel, encased
in fireproof tiling.
- 2 It is faced with fireproof stone
and Terra Cotta.
- 3 It has metal window frames and
metal window casings.
- 4 *Its windows are Wire Glass (Pol-
ished) absolutely fireproof and im-
possible to befog. In other words,
the building would withstand the
fiercest, hottest external blaze.*

What if paper or wooden furniture
should start a fire inside?

It would be confined to one room
because:

- 1 This building has cement floors
and tile partitions—both fire-
proof.
- 2 *It has metal doors and metal tran-
soms leading to corridors filled with
Wire Glass.*
- 3 It has metal mouldings and base-
boards.
- 4 There is no areaway or open space
in the entire building.
- 5 Even the elevator shafts are in-
closed by fireproof, draft-proof
construction.

But even this did not satisfy us—we took further precautions.

- 1 *We installed two separate, inde-
pendent, self-contained elevator
shafts inclosed by fireproof, smoke-
proof walls and Wire Glass doors.*
- 2 *We installed two separate, self-
contained stairways (independent
of the elevator shafts) inclosed by
fireproof, smoke-proof walls and
Wire Glass doors.*

THE UNION CENTRAL BUILDING CANNOT BURN

PROPER TERMS FOR SPECIFYING WIRE GLASS AND FIGURED GLASS



From some specifications it is confusing to the Glass Contractor to understand exactly what type of glass is desired. For example, specifications have been known to call for plain wire glass with the intention of getting a specific style of Wire Glass. In one case Polished Wire Glass was wanted, but the jobber, thinking Rough Wire Glass to be about the plainest and among the least expensive, figured on this style and furnished it, so that due to the improper term used in specification considerable trouble was caused. Therefore, specification writers should bear in mind the following in order to specify correctly so the contractor can make no mistake.

Mistakes are made in specifying Plain Wire Glass, Plain Polished Plate Wire Glass, Polished Plate Wire Glass, Plate Wire Glass meaning Polished Wire Glass, and specifying Florentine or Maze Wire Glass as a common term for any figured Wire Glass, whereas the specification calls for a specific style of figured Wire Glass. If you will consult the center pages of this book you will find cuts of the various types of Wire Glass and Plain Figured Glass with their correct names beneath which should be used to specify the particular style of glass desired for your work. These are the names given the different products by the manufacturer, and all glass contractors are thoroughly familiar with them.

It is also to your advantage to prefix the name Mississippi where you desire the standard and best obtainable quality.



WIDTH

MURANESE "WIRE GLASS"

Sizes up to 46" wide and 130" long. Thicknesses $\frac{1}{4}$ and $\frac{3}{8}$ of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



WIDTH

MAZE "WIRE GLASS"

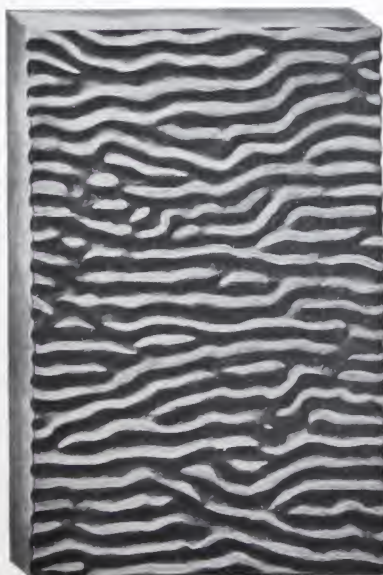
Sizes up to 46" wide and 130" long. Thicknesses $\frac{1}{4}$ and $\frac{3}{8}$ of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



WIDTH

ROMANESQUE GLASS

Sizes up to 48" wide and 110" long for $\frac{1}{8}$ " thick and 60" wide and 110" long for $\frac{3}{16}$ " thick.



WIDTH

ONDOYANT GLASS

Sizes up to 30" wide and 100" long. Thickness $\frac{1}{8}$ of an inch.



WIDTH

FIGURE NO.

Sizes up to 42" wide. Thicknesses $\frac{1}{8}$ and $\frac{1}{16}$.



WIDTH

ROMANESQUE "WIRE GLASS"

Sizes up to 46" wide and 130" long. Thicknesses $\frac{1}{4}$ and $\frac{3}{8}$ of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



WIDTH

SYENITE "WIRE GLASS"

Sizes up to 46" wide and 130" long. Thicknesses $\frac{1}{4}$ and $\frac{3}{8}$ of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



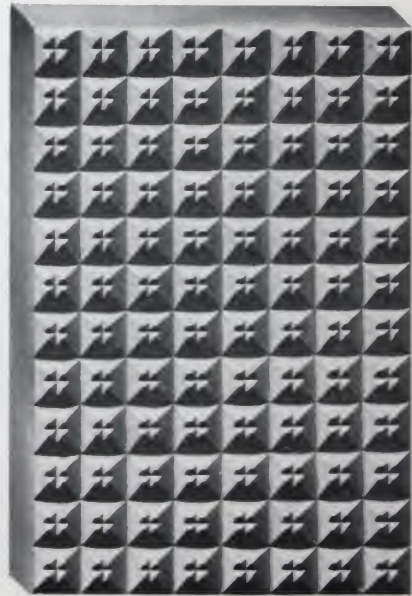
GLASS
and 110" long.
of an inch.



WIDTH

MAZE GLASS

Sizes up to 42" wide and 110" long. Thicknesses $\frac{1}{8}$ and $\frac{3}{16}$ of an inch.



WIDTH

APEX GLASS

A polished Plate Prismatic Figured Glass about $\frac{1}{4}$ " thick. Made in sizes up to 50" wide and 100" long.



WIDTH

POLISHED "WIRE GLASS"

Sizes up to 46" wide and 130" long. Thicknesses about $\frac{1}{16}$ " and $\frac{3}{16}$ " of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



WIDTH

ROUGH "WIRE GLASS"

Sizes up to 46" wide and 130" long. Thicknesses $\frac{1}{4}$ " and $\frac{3}{8}$ " of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



WIDTH

MURANESE GLASS

Sizes up to 42" wide and 110" long. Thicknesses $\frac{1}{8}$ " and $\frac{3}{16}$ " of an inch.



WIDTH

SYENITE GLASS

Sizes up to 42" wide and 110" long. Thicknesses $\frac{1}{8}$ " and $\frac{3}{16}$ " of an inch.



FLOREN

Sizes up to 42" wide and 110" long. Thicknesses $\frac{1}{8}$ " and $\frac{3}{16}$ " of an inch.



WIDTH

RIBBED "WIRE GLASS"

Sizes up to 46" wide and 130" long. Thicknesses $\frac{3}{4}$ and $\frac{7}{8}$ of an inch. The twist of the wire runs with the length of the sheet, and should be set vertically. In ordering always specify width first.



WIDTH

PENTECOR GLASS

Thicknesses $\frac{3}{4}$ and $\frac{7}{8}$ of an inch. Sizes 18" to 44" wide and up to 120" long.



WIDTH

FINE GLASS

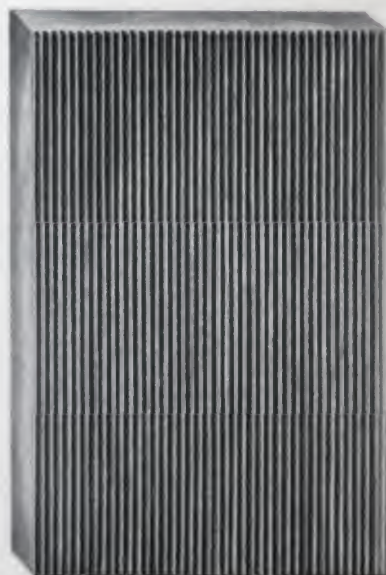
Sizes up to 44" wide and 110" long. Thicknesses $\frac{3}{4}$ and $\frac{7}{8}$ of an inch.



WIDTH

ROUGH GLASS

Sizes up to 44" wide and 120" long. Thicknesses $\frac{3}{4}$, $\frac{7}{8}$, $\frac{1}{4}$, $\frac{1}{8}$ and $\frac{1}{16}$ of an inch.



WIDTH

RIBBED GLASS

Sizes up to 44" wide and 120" long. Thicknesses $\frac{3}{4}$, $\frac{7}{8}$, $\frac{1}{4}$, $\frac{1}{8}$ and $\frac{1}{16}$ of an inch. The rib runs with the length of the sheet. In ordering always specify width first.



AEOLIAN BUILDING
NEW YORK

WARREN & WETMORE

Architects

THE above picture illustrates a fire barrier of Mississippi Wire Glass as a protection from fire in the low adjoining buildings. Mississippi Polished Wire Glass is installed in the lower sash to admit of an unobstructed view, and in the upper sash, Mississippi Rough Wire Glass, which is not transparent and is less expensive, offers the maximum of efficiency, at the same time reducing the cost of equipment.

Entrance hall is glazed with Mississippi Polished Wire Glass.

All corridor doors and partitions are glazed with Mississippi "Syenite" Figured Glass.



VIEW OF PENNSYLVANIA TERMINAL FROM 7th AVENUE
NEW YORK CITY



SKYLIGHT OVER CONCOURSE

PENNSYLVANIA TERMINAL, N. Y. C.

Mississippi Rough Wire Glass installed.



RAILWAY EXCHANGE
ST. LOUIS

MAURAN, RUSSELL & CROWELL, Architects
J. F. RUTH Metal Frames

THIS building has at the present time the greatest floor area of any building in the world, and with the exception of the ground floor, is completely equipped with Mississippi products.

Interior partitions, doors and transoms, Mississippi 3-16" Romanesque. All windows above ground floor, Mississippi Polished Wire Glass and Rough Wire Glass.

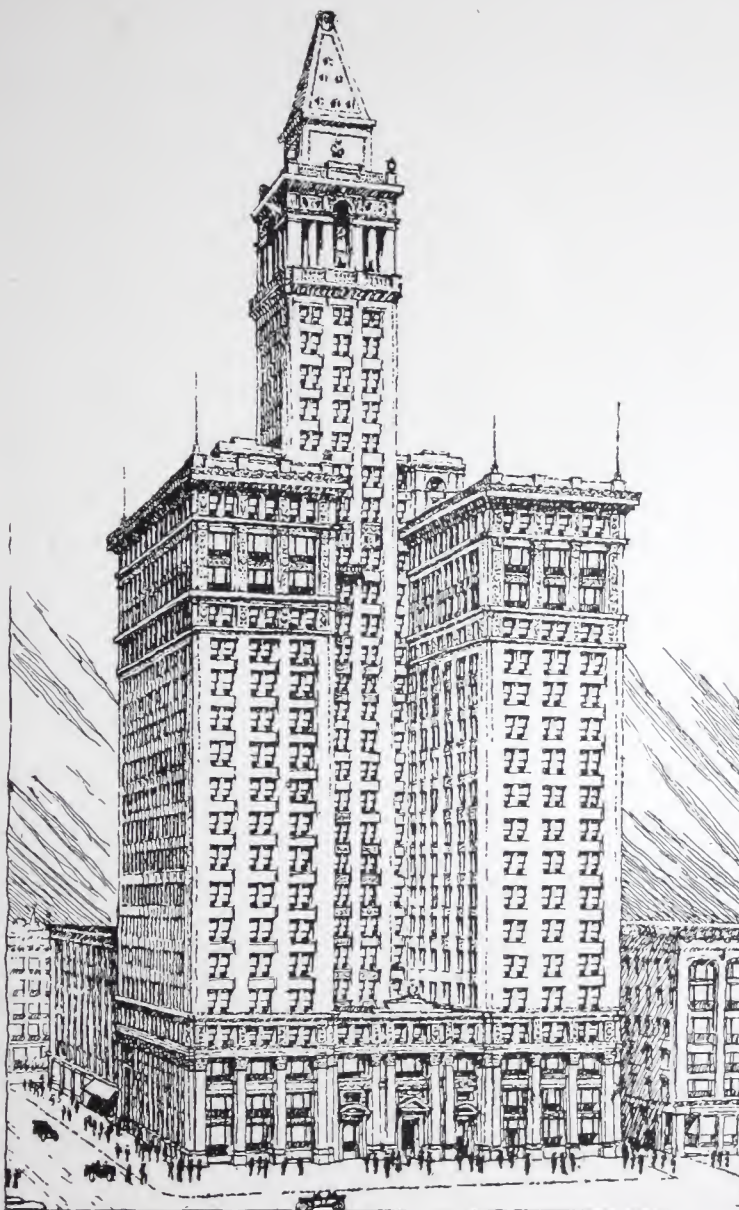


42-STORY L. C. SMITH BUILDING
SEATTLE

GAGGIN & GAGGIN, SYRACUSE, NEW YORK Architects
WHITNEY CO., NEW YORK CITY Contractors

The highest office building in the world outside of New York City.

IN the north wall abutting adjoining property up to and including 12th story and all court windows on this side up to roof of main building, all windows on alley up to and including 13th story and all windows in court on this side up to roof of main building and all elevators are enclosed in Mississippi Polished Wire Glass.



MONWARD BUILDING
ST. LOUIS

MONWARD REALTY CO. Owners
EAMES & YOUNG Architects

MISSISSIPPI Polished Wire Glass Maze Wire Glass and Plain Maze
Glass installed.



INSURANCE EXCHANGE
CHICAGO

THOMPSON-STARRETT CO. . . Contractors
D. H. BURNHAM & CO. . . Architects

MISSISSIPPI Polished and Ribbed Wire Glass and Mississippi 3-16"
Maze Glass installed.



BLACKSTONE HOTEL
CHICAGO

THE DRAKE HOTEL CO. Owners
MARSHALL & FOX Architects

Mississippi Polished and Maze Wire Glass installed.



PEOPLE'S GAS BUILDING
CHICAGO

THE PEOPLE'S GAS CO. . . . Owners
D. H. BURNHAM & CO. . . . Architects
McFARLAND, HYDE CO. Metal Frame Contr's.

IN this building quality of materials was a most important factor,
therefore Mississippi Polished Wire Glass was installed.



COMMERCE BUILDING
ST. PAUL

HERMAN KRETZ . . . Architect and Owner

MISSISSIPPI Wire Glass installed in all fireproof windows, elevator doors and enclosures, partition sash and doors.



EXTERIOR OF POWER PLANT AND MILLS



INTERIOR OF MILL

POSTEX COTTON MILLS, POST, TEXAS

ABOVE is illustrated the most modern form of fireproof mill construction, which decidedly reduces insurance rates.

This plant is substantially built of reinforced concrete and metal frames in which Mississippi 14" Mate Wire Glass is installed.



J. P. SMITH SHOE CO. BUILDING
CHICAGO

VOIGTMANN & CO. Metal Frames
R. H. WILSON & CO. Architects

Mississippi $\frac{1}{4}$ " Ribbed Wire Glass installed.



BORLAND BUILDING
CHICAGO

GEO. A. FULLER & CO. Contractors
CHAS. S. FROST Architect
VOIGTMANN & CO. Metal Frames

Mississippi Polished and Ribbed Wire Glass installed.

UNION TRUST COMPANY FIRE

THE picture opposite was taken looking south across the zone of the fire of December 11, 1912, Cincinnati, Ohio. To the left are the ruins of the Gibson House, which fronts on Walnut St. The Union Trust Building, towering in the rear, is an object lesson of what could have been avoided by installing Wire Glass in approved metal frames. Pipes of the open sprinkler system which failed can be discerned over every other row of windows in the north wall.

The Union Trust Building is practically a ruin, though it was supposedly fireproof, and with the exception of window openings it might well be considered as fireproof as many others are.

This is an ideal illustration of lack of proper protection. A modern building constructed of fireproof materials from cellar to roof *with but one exception*, and that was the cause of its ruin.

Here is a building which may well be considered a credit to any owner, architect or engineer, but for some reason one of the most important features of a *real* fireproof building was omitted—APPROVED METAL FRAMES AND WIRE GLASS IN ALL WINDOW OPENINGS, and had this important feature been considered and installed, many thousands of dollars would have been saved.



UNION TRUST COMPANY BUILDING FIRE
CINCINNATI, OHIO

Dec. 11th, 1912

NOTE how the above building, with the exception of windows, has withstood the fire.



PALACE HOTEL
SAN FRANCISCO

MAHONEY BROS. Builders
TROWBRIDGE & LIVINGSTON . Architects

Mississippi 3-8" Ribbed Wire Glass installed.



ST. FRANCIS HOTEL
SAN FRANCISCO

MAHONEY BROS. Builders
BLISS & FAVILLE . Architects



WELLS-FARGO BUILDING
SAN FRANCISCO

H. H. MEYERS Architect

EQUIPPED with Mississippi Wire Glass in all openings where Wire Glass was required.



HALE BROS. DRY GOODS STORE
SAN FRANCISCO

McDONALD & KAHN Builders

REID BROS. Architects

WHERE Wire Glass was required Mississippi Wire Glass was installed.



MILLS BUILDING
SAN FRANCISCO

D. H. BURNHAM & CO. . . . Architects

WHERE Wire Glass was required Mississippi Wire Glass was installed.



PHELAN BUILDING
SAN FRANCISCO

MAHONEY BROS. Builders
WM. CURLETT & SON Architects

WHERE Wire Glass was required Mississippi Wire Glass was installed.



FLOOD BUILDING
SAN FRANCISCO

ALBERT PISSIS Architect

WHERE Wire Glass was required Mississippi Wire Glass was installed.



VIEW of exterior wall of a similar type of construction for the purpose of admitting the maximum amount of natural light. A figured pattern of Mississippi Wire Glass was used on account of its superior diffusive qualities.



VIEW of interior room formed by the use of metal and glass partitions. Note the amount of light obtained by using a prismatic figured pattern of Mississippi Wire Glass.

SOME PROMINENT BUILDINGS EQUIPPED WITH THE RECOGNIZED STANDARD WIRE GLASS AND FIGURED GLASS MADE BY THE MISSISSIPPI COMPANIES

<i>City</i>	<i>Owner</i>	<i>Type of Building</i>	<i>Architect</i>
Oakland, Cal.	City of Oakland	City Hall	Palmer, Hornbostel & Jones
Oakland, Cal.	Hotel Oakland	Hotel	Bliss & Faville
Oakland, Cal.	Kahn Bros. Dry Goods Co.		C. W. Dickey
San Francisco, Cal.	Adler Sanitarium		MacDonald & Applegarth
San Francisco, Cal.	Crocker Building		W. Page Brown
San Francisco, Cal.	First National Bank	Bank	D. H. Burnham & Co.
San Francisco, Cal.	Ferry Building		
San Francisco, Cal.	Granada Hotel		N. P. Noonan
San Francisco, Cal.	Hewes Building		Reid Bros.
San Francisco, Cal.	Humboldt Bank		Meyer & O'Brien
San Francisco, Cal.	Moore-Watson & Co.		MacDonald & Applegarth
San Francisco, Cal.	Pacific Building		C. F. Whittlesey
San Francisco, Cal.	Claus Spreckles Building		Reid Bros.
San Francisco, Cal.	John D. Spreckles & Bros.		MacDonald & Applegarth
Hartford, Conn.	Travelers' Insurance Co.	Office	Donn Barber
New Haven, Conn.	Court House Commission	Court House	Allen & Williams
So. Manchester, Conn.	Cheney Brothers	Dressing Mill	Wm. C. Henry
Washington, D. C.	S. W. Woodward	Office	Harding & Upman
Washington, D. C.	Frank A. Munsey	Office	McKim, Mead & White
Washington, D. C.	P. R. R. & B. & O. R. R. Companies	Union Station	D. H. Burnham & Co.
Jacksonville, Fla.	Florida Life Insurance Co.		H. J. Kluthro
Atlanta, Ga.	Southern Railroad	Frt. Depot & Office	D. W. Lum
Atlanta, Ga.	Texas Oil Co.		
Chicago, Ill.	Mrs. Harriet E. Borland	Borland Building	Chas. S. Frost
Chicago, Ill.	Butler Brothers		D. H. Burnham & Co.
Chicago, Ill.	Chicago & Northwestern R.R.	Northwestern Sta.	Frost & Granger
Chicago, Ill.	Chicago Telephone Co.	Bell Tel. Bldg.	Holabird & Roche
Chicago, Ill.	C. C. Heisen	Transportation	Purdy & Henderson
Chicago, Ill.	The Drake Hotel Co.	Blackstone Hotel	Marshall & Fox
Chicago, Ill.	Hotel Sherman Co.	Sherman Hotel	Holabird & Roche
Chicago, Ill.	Insurance Exchange Bldg.		D. H. Burnham & Co.
Chicago, Ill.	The People's Gas Co.		D. H. Burnham & Co.
Chicago, Ill.	J. P. Smith Shoe Co.		H. R. Wilson & Co.
Chicago, Ill.	Sturmer Rosenthal & Eckstein	North American	Holabird & Roche
Baltimore, Md.	Johns Hopkins Hospital	Phipps Psychiatric Clinic	Grosvenor Atterbury
Baltimore, Md.	Baltimore & Ohio R. R. Co.	Office	H. D. Hale
Boston, Mass.	Commonwealth Piers	Piers	J. R. Worcester & Co. Con. Engrs.
East Boston, Mass.	East Boston Development Co.	Mill No. 1	Lockwood, Greene & Co.
Springfield, Mass.	Hampden Hotel Co.	Hotel	
Springfield, Mass.	Town of Springfield	Municipal	Pell & Corbett
St. Paul, Minn.	Commerce Building		
St. Louis, Mo.	Railway Exchange	Office	Mauran, Russell & Crowell
Camden, N. J.	Victor Talking Machine Co.	Factory & Power House	Ballinger & Perrot
Edgewater, N. J.	Midland Linseed Oil Co.	Plant	
Huboken, N. J.	North German Lloyd Piers	Pier	W. F. Whittemore, Engr.
Jersey City, N. J.	Butler Brothers	Warehouse	Jarvis Hunt
Newark, N. J.	L. Bamberger & Co.	Department Store	Jarvis Hunt
Newark, N. J.	Kinney Estate	Office	Cass Gilbert
Rahway, N. J.	3-in-1 Oil Co.		
Trenton, N. J.	Broad St. National Bank	Bank	Wm. A. Poland
Albany, N. Y.	Hudson Hotel Co.	Hotel	Frank M. Andrews & Co.
Albany, N. Y.	New York State	Educational	Palmer & Hornbostel
Brooklyn, N. Y.	Bush Terminal Co.	Warehouse No. 2	Wm. Higginson
Brooklyn, N. Y.	Bush Terminal Co.	Factory No. 4	Wm. Higginson

<i>City</i>	<i>Owner</i>	<i>Type of Building</i>	<i>Architect</i>
Buffalo, N. Y.	The Larkin Co.	Receiving & Distr.	R. J. Reidpath & Son
Buffalo, N. Y.	Marine National Bank	Bank & Office	Green & Wicks
Buffalo, N. Y.	New York Telephone Co.	Office	McKenzie, Voorhees & Gmelin
Jamestown, N. Y.	Sherman Hotel	Hotel	Esenwein & Johnson
Long Island City, N. Y.	Brewster & Company	Manufacturing . .	Stephenson & Wheeler
New York City, N. Y.	Adams Express Co.	Office	Francis H. Kimball
New York City, N. Y.	Æolian Co.	Office	Warren & Wetmore
New York City, N. Y.	American Bank Note Co.	Printing Establish- ment	Kirby, Petit & Green
New York City, N. Y.	Architects' Offices, Inc.	Office	Ewing & Chappell and La Farge & Morris
New York City, N. Y.	Armory Holding Co.	Loft	Wm. H. Whittall
New York City, N. Y.	Bankers' Trust Co.	Office	Trowbridge & Livingston
New York City, N. Y.	Edward West Browning	Office	Buchman & Fox
New York City, N. Y.	City of New York	Municipal	McKim, Mead & White
New York City, N. Y.	City Investing Co.	Office	Francis H. Kimball
New York City, N. Y.	Croisic Realty Co.	Store & Office . .	Frederick C. Brown
New York City, N. Y.	East River Savings Institution	Bank & Office . .	Clinton & Russell
New York City, N. Y.	Emigrant Savings Industrial Assn	Bank	Raymond F. Almirall
New York City, N. Y.	Thos. Addis Emmet	Commercial	Barney & Colt
New York City, N. Y.	Fire Companies Bldg. Corp'n.	Office	D. H. Burnham & Co.
New York City, N. Y.	42d St. & Madison Ave. Co.	Store & Office . .	Buchman & Fox
New York City, N. Y.	Gimbel Brothers	Department Store .	D. H. Burnham & Co.
New York City, N. Y.	Ginn & Co.	Chas. A. Rich
New York City, N. Y.	Guaranty Trust Co.	Bank & Office . .	York & Sawyer
New York City, N. Y.	Mrs. John R. Hegeman	Office & Loft . . .	D. Everett Waid
New York City, N. Y.	Hess Realty Co.	Store & Loft . . .	Neville & Bagge
New York City, N. Y.	Liberty-Nassau Building Co.	Office (Bryant Bldg)	Henry Ives Cobb
New York City, N. Y.	Masonic Hall & Asylum Fund.	Office	H. P. Knowles
New York City, N. Y.	Metropolitan Life Ins. Co.	Office	N. LeBrun & Sons
New York City, N. Y.	N. Y. Cent. & Hudson Riv. R.R.	Grand Central Sta.	Reed & Stem and Warren & Wetmore Assoc.
New York City, N. Y.	N. Y. Cent. & Hudson Riv. R.R.	Biltmore Hotel . .	Reed & Stem and Warren & Wetmore Assoc.
New York City, N. Y.	New York Telephone Co.	Office	McKenzie, Voorhees & Gmelin
New York City, N. Y.	Pennsylvania Railroad	Terminal	McKim, Mead & White
New York City, N. Y.	Archibald D. Russell	Storage Warehouse	L. C. Holden
New York City, N. Y.	Singer Manufacturing Co.	Office	Ernest Flagg
New York City, N. Y.	Underwriters Building Co.	Loft & Office . . .	Howells & Stokes
New York City, N. Y.	United Cigar Stores Co.	Warren & Wetmore
New York City, N. Y.	Alfred Gwynn Vanderbilt	Hotel	Warren & Wetmore
New York City, N. Y.	West Street Building	Office	Cass Gilbert
New York City, N. Y.	F. W. Woolworth	Office	Cass Gilbert
New York City, N. Y.	Hudson & Manhattan Ry. Co.	Office & Terminal .	Clinton & Russell
Philadelphia, Pa.	Curtis Publishing Co.	Publishing	Frank C. Roberts & Co. and Edgar V. Seeler
Pittsburgh, Pa.	Armstrong Cork Co.	Warehouse & Office	Private Plans
Pittsburgh, Pa.	Pittsburgh Athletic Assn.	Club House	Janssen & Abbott
Pittsburgh, Pa.	First National Bank	Office	D. H. Burnham & Co.
Richmond, Va.	First National Bank	Bank & Office . . .	Clinton & Russell and Al- fred C. Bossom
Richmond, Va.	Virginia Railway & Power Co.	Office	Alfred C. Bossom
Seattle, Wash.	Burns Lyman Smith	L. C. Smith Bldg.	Gaggin & Gaggin
Princeton, W. Va.	Virginia Railroad Co.	Shops	H. Fernstrom, C. E.
Winnipeg, Can.	Canadian Northern R.R.	Terminal	Warren & Wetmore
St. Louis, Mo.	Monward Realty Co.	Office	Eames & Young
St. Louis, Mo.	Deitzel Engine Co.
Rossford, Ohio	The Edw. Ford Plate Glass Co.	Factory	DeVore & McGormley Co.



